

AMENDMENTS TO THE CLAIMS

1 - 4. (Canceled)

5. (Currently amended) A superconductive microstrip filter, comprising:
- an input coupling line, for receiving signals to be filtered and coupling-outputting said signals;
 - a plurality of U-type superconductive microstrip resonators with the same structure and dimension, for performing filtering process for said signals output by said input coupling line to obtain filtered signals in a corresponding frequency band and then coupling-outputting said ~~obtained~~-filtered signals;
 - an output coupling line, for coupling-outputting said filtered signals outputted by said plurality of U-type superconductive microstrip resonators[[.]];

wherein each of said plurality of U-type micro-superconductive microstrip resonators comprises ~~has a superconductive microstrip line bent to a U-type structure having a longer side and a shorter side that are parallel and of different lengths, the formed by a superconductive microstrip line, the~~ having a whole length of said superconductive microstrip line bent to said U-type structure is as long as half of the wavelength corresponding to the center frequency of a said superconductive microstrip filter constituted by said U-type superconductive microstrip resonator, and two sides of an open end of said U-type structure are different from each other in length and the two sides are parallel to each other[[.]];

wherein said longer sides and said shorter sides of all of said plurality of U-type superconductive microstrip resonators are arranged in parallel with each other, and wherein any two each neighboring pair U-type superconductive microstrip resonators in said plurality of U-type superconductive microstrip resonators are ~~is arranged axisymmetrically and in parallel with each other, and for the any two neighboring U-type superconductive microstrip resonators of each of said neighboring pairs being arranged axisymmetrically and in parallel with each other,~~

having said a longer side of an open end of each resonator is closer to a symmetrical axis than said a shorter side of the open end of a shorter side of an open end of each resonator is closer to a symmetrical axis than a longer side of the open end.

6 - 10. (Canceled)

11. (Currently amended) The superconductive microstrip filter of claim 5, wherein the interval between ~~any two neighboring~~ each of said plurality of U-type superconductive microstrip resonators is determined in accordance with particular requirements for designing said superconductive microstrip filter.

12-15. (Canceled)

16. (Currently amended) The superconductive microstrip filter of claim 5, wherein, ~~as for~~ the U-type superconductive microstrip resonator which is closest to said input coupling line among said plurality of U-type superconductive microstrip resonators, ~~one side of said open end thereof being closer to said input coupling line~~ has a top end of said longer side or said shorter side closest to said input coupling line aligned with ~~the~~ a top portion of said input coupling line.

17-21. (Canceled)

22. (Currently amended) The superconductive microstrip filter of claim 5, wherein, ~~as for~~ the U-type superconductive microstrip resonator ~~being~~ which is closest to said output coupling line among said plurality of U-type superconductive microstrip resonators, ~~one side of said open end thereof being closer to said output coupling line~~ has a top end of said longer side or said shorter side closest to said output coupling line aligned with ~~the~~ a top portion of said output coupling line.

23-27. (Canceled)

28. (Currently amended) A superconductive microstrip filter apparatus comprising a plurality of U-type superconductive microstrip resonators, wherein:

~~each of said plurality of U-type superconductive microstrip resonators are formed~~
~~using comprises a superconductive microstrip line bent to a U-type structure~~
~~having a longer side and a shorter side that are parallel and of different lengths;~~
~~said plurality of U-type microstrip resonators are configured such that the number of~~
~~poles of the microstrip filter can be increased without increasing the size of the~~
~~superconductive microstrip filter;~~
~~said length of the two sides of each of said plurality of U-type microstrip resonators are~~
~~unequal such that each of said plurality of U-type microstrip resonators has a~~
~~long side and a short side; and~~
~~said plurality of U-type microstrip resonators are arranged such that the two sides of~~
~~each of said plurality of U-type microstrip resonators are parallel with each~~
~~other, and any two neighboring U-type superconductive microstrip resonators in~~
~~said plurality of U-type superconductive microstrip resonators are arranged~~
~~axisymmetrically and in parallel with each other[.]; and~~
~~the superconductive microstrip line of each of said plurality of U-type superconductive~~
~~microstrip resonators has a length of half of the wavelength corresponding to~~
~~the center frequency of said superconductive microstrip filter.~~

29. (Currently amended) A superconductive microstrip filter apparatus comprising a plurality of U-type superconductive microstrip resonators as recited in claim 28, said superconductive microstrip filter apparatus further comprising:

an input coupling line for receiving signals to be filtered and coupling-outputting said signals; and

an output coupling line, for coupling-outputting said filtered signals outputted by said plurality of U-type superconductive microstrip resonators.

30. (Cancelled)

31. (Currently amended) A superconductive microstrip filter ~~apparatus~~ comprising a plurality of U-type superconductive microstrip resonators as recited in claim 28, wherein said longer side of each of said plurality of U-type microstrip resonators is closer to a symmetrical axis of said axisymmetrical arrangement than said shorter side.

32. (Currently amended) A superconductive microstrip filter ~~apparatus~~ comprising a plurality of U-type superconductive microstrip resonators as recited in claim 28, wherein said shorter side of each of said plurality of U-type microstrip resonators is closer to a symmetrical axis of said axisymmetrical arrangement than said longer side.

33. (Currently amended) A superconductive microstrip filter ~~apparatus~~ comprising a plurality of U-type superconductive microstrip resonators as recited in claim 29, wherein as ~~for the U-type superconductive microstrip resonator being~~ which is closest to said output coupling line among said plurality of U-type superconductive microstrip resonators, ~~one side of said open end thereof being closer to said output coupling line~~ has a top end of said longer side or said shorter side closest to said output coupling line aligned with ~~the~~ a top portion of said output coupling line.

34-36. (Cancelled)

37. (Currently amended) A superconductive microstrip filter ~~apparatus~~ comprising:
a plurality of U-type superconductive microstrip resonators, wherein:
~~said length of the two sides of each of said plurality of U-type~~ superconductive
~~microstrip resonators are unequal such that each of said plurality of U-~~

~~type microstrip resonators has a long side and a short side~~ has a longer side and a shorter side that are parallel and of different lengths; and ~~said plurality of U-type microstrip resonators are arranged such that the two sides of each of said plurality of U-type microstrip resonators are parallel with each other, and any two neighboring U-type~~ superconductive microstrip resonators in said plurality of U-type superconductive microstrip resonators are arranged axisymmetrically and in parallel with each other; and said longer sides of said plurality of U-type superconductive microstrip resonators are arranged to face toward a same direction; and an output coupling line, for coupling-outputting ~~said filtered~~ signals outputted by said plurality of U-type superconductive microstrip resonators, wherein: ~~as for the U-type superconductive microstrip resonator being which is~~ closest to said output coupling line among said plurality of U-type superconductive microstrip resonators, ~~one side of said open end thereof being closer to said output coupling line~~ has a top end of said longer side or said shorter side closest to said output coupling line aligned with the ~~a~~ top portion of said output coupling line.